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ABSTRACT

Career education materials were analyzed (1) to ascertain what work-related values and attitudes are represented, (2) to note relative emphasis given to competing views, and (3) to compare the value content of the materials with the views presented in scholarly and journalistic literature on work. The literature was reviewed to determine the range and substance of ideas involved in serious deliberations about whether or not there is a definable work ethic and what changes it may be undergoing. An interpretative summary of the review identified major cultural trends influencing change in the traditional American work ethic. A sample of 107 items (mostly from the Far West Laboratory and the California Department of Education collections), all printed materials including four filmstrip scripts, were selected to insure variation in types of materials, classes of developer, and levels of schooling. Excerpts from each item were examined independently by three judges and classified according to a set of forty-nine value categories to judge what specific attitudes, values, or habits each excerpt transmits to the reader. Materials were found not to present a realistic view of work and, with qualifications, not to convey an industry-serving party line. Based on the conclusion that current career education reflects an overly simple and narrowly biased treatment of work related values and attitudes, implications are outlined for educational policy makers and curriculum planners. (JT)

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THE WORK ETHIC
IN CAREER EDUCATION MATERIALS

Robert M. Peterson
James N. Johnson

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INTRODUCTION

Until recently, concern with work-related attitudes and values in America seemed a subject only for industrial psychologists and scholarly journals; job satisfaction was widely viewed as a question of wages, hours, and benefits. In the past few years, however, worker attitudes have emerged as a major topic of public discussion. Some observers claim that the focus has shifted, as Robert Blauner puts it, "from concern with economic and social justice to the quality of the inner life." For many this shift signifies a profound change — some say a growing crisis — in American work values. This study grew out of a desire to understand career education's current role and future potential in helping young people cope with this change — how it can or should operate to support the affective side of career development.

There appears to be no question about career education's commitment to do something about students' work values and attitudes; responsibility for influencing their development is consistently acknowledged in statements of career education's rationale and purpose. For example, the U.S. Office of Education has made it a matter of federal policy that career education seeks to produce individuals who are "capable of choosing and who have chosen a personally meaningful set of work values that lead them to possess a desire to work."* Further evidence of the high priority given work values by career-education advocates is this widely endorsed definition:

Career education is the total effort of education and the community to help all individuals become familiar with the values of a work-oriented society, to integrate such values into their personal value systems, and to implement those values in their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.**

* Hoyt, Kenneth B. An Introduction to Career Education: A Policy Paper of the U.S. Office of Education. DHEW Publication No. (OE) 75-00504, 1975, p.11. The quotation is one of nine learning goals. Two others are also concerned with work values and habits.

** Chamber of Commerce of the U.S. Career Education: What It Is and Why We Need It. Washington, D.C.: USCC, 1975, page 4.

While such statements make the general intent reasonably clear, they raise some unanswered questions about the *content* of value development in career education. With what particular values are students made familiar? Even if career education deals explicitly only with a content-free *process* of value development, there remains the question of what value options are available to the student for consideration and selection. Is the process a haphazard identification and reinforcement of options, or do career educators offer a prescribed set of particular values and attitudes for the student's consideration? If certain values have been adopted in career education, whether for purposes of inculcation or non-directive "clarification," then questions can be raised about the merits of those particular values: for example, do the values square with today's realities? "Realism" seems an appropriate criterion for a program intended to prepare young people for adult working life and to ease the transition from school to work.

In this study we have tried to obtain answers, at least in a preliminary way, to some of the questions posed above. We asked: (a) Is there specific value content in career education? (b) If so, what is that content? and (c) Is it realistic?

Value content may be contained in various components of a career education program. It may reside in the community-based experiences of students, in the actions and spoken words of teachers and counselors, or in printed and other media materials. We chose materials — because they are more accessible than other sources and because they represent a durable record of the substance of career education. Admittedly, what teachers, counselors, and community volunteers say and do may differ from and be more potent than books and films in shaping a student's values. Therefore, confining the search to materials is a limitation of this study that should be kept in mind in considering the results.

To assess how realistic the materials are in their view of contemporary working life, we looked to published literature for definitions of "reality." The literature we reviewed is a large, heterogeneous, and loosely connected body of books, professional journal articles, blue-ribbon reports, and feature articles, authored predominantly by sociologists, economists, journalists, and social critics. Although the evidence is incomplete and contradictory, dominant patterns and emphases do emerge and it is possible to compare a "literature view" with a "materials view" of work.

Our purpose, then, is to (1) ascertain what work-related values and attitudes are represented in career education materials, (2) analyze the relative emphasis given to competing views, and (3) compare the value content of the materials with the views presented in scholarly and journalistic literature on work.

The results of this study are aimed primarily at educational policy makers and curriculum planners. The underlying issue is whether or not the schools are communicating ideas about work that are in tune with today's realities and that serve the needs of youth and society. These findings could, for example, be germane to research priorities and investment decisions, or they might stimulate and inform a reconsideration of career education's objectives, or lead to the review and possible redesign of specific school materials. In any event, if career education takes seriously its self-imposed responsibility to facilitate and enhance value development, it is essential that career educators at least know what they are now saying about values and how it squares with what others are saying. This study is intended to be a step in that direction.

What educational materials say about work is, of course, but one small piece of the larger issue. Policy makers also need better understanding of today's realities concerning work, the values and attitudes that will serve students well in coping with those realities and whose preservation is necessary to society's health, and the real determiners of ethical development among youth. This study sheds no new light on those important topics.

To establish a framework for the analysis of materials, we first reviewed the literature to determine the range and substance of ideas involved in serious deliberations about whether or not there is a definable work ethic, and what changes it may be undergoing. An interpretive summary of the literature review is presented in the next section of this paper, followed by a report of the materials analysis, conclusions, and implications.

REVIEW OF ISSUES

One of the difficulties in trying to clarify current trends and issues regarding contemporary work values is that, as George Strauss (1974) puts it, "in a society with a short fuse all causes of discontent tend to exacerbate each other." Because work values impinge on every major facet of American life, one faces circular questions: is a "highly regimented, increasingly automated, deeply impersonal industrial society" creating dull and unrewarding jobs, or do apathy and dissatisfaction in the workplace reflect a general disenchantment with modern life? Is an increasingly visible conflict between the imperatives of profit and human welfare eroding the work ethic, or have improved economic conditions created a "revolution of rising expectations?"

The literature that explores these questions is highly speculative. It consists of "anecdotal" evidence, scholarly opinion, conflicting summaries of questionnaire statistics, and the barometric readings of seasoned "journalists" (a term habitually assigned to writers who consider the problem an alarming one). The sum of it does suggest a "radical transformation" in this society's work-values system, and points not to a "national trend," but rather a "multiplicity of trends, problems and possibilities." (Quinn, 1974)

This transformation is reflected first of all in the increasing claims of widespread worker dissatisfaction. As Paul Dickson puts it, "The media, the survey takers, the polsters, and an increasing number of academicians and politicians have discovered the fact that a lot of people actively hate their work." (Dickson, 1976) Two recent publications have been especially influential in focusing public attention on this discontent (in part perhaps because, while entirely different in approach and content, their message is the same). In Studs Terkel's Working (a mosaic of interviews he conducted over a three-year period with some 136 people from all walks of life), a picture of modern work emerges as a series of "daily humiliations," of people in search of "a sort of life rather than a Monday through Friday sort of dying." Work in America, commissioned by HEW, is the report of a ten-man task force based on some fifty technical papers; it concludes that:

Significant numbers of American workers are dissatisfied with the quality of their working lives. Dull, repetitive, seemingly meaningless tasks, offering little challenge or autonomy, are causing discontent among workers at all occupational levels.

Even the small sample of interviews conducted by the task force sounded like Terkel's: "The respondents were full of bitterness about the conditions under which they toiled, and full of expletives which conveyed their frustration. They poured out the result of years of pent-up hostility toward their bosses, their unions, and their society." (O'Toole, 1976)

This view is echoed by the majority of social scientists who have examined the problem. Sheppard and Herrick, in Where Have All The Robots Gone?, contend that:

More and more workers — and every day this is more apparent — are being disenchanted with the boring, repetitive tasks set by the merciless assembly line or by bureaucracy. They feel they have been herded into economic and social cul-de-sacs.

Similarly, David and Cherns, in their recent two-volume, The Quality of Working Life, conclude that:

Significant numbers are telling us they are not prepared to participate in productive society under these alienating conditions.

In various ways this discontent is seen as a threat to the welfare of our society. Work in America calculates that "a great part of the staggering national bill in the areas of crime and delinquency, mental and physical health, manpower and welfare are generated in our national policies and attitudes toward work." The nature of work, according to Bowles and Gintis (1976), is perhaps the most fundamental determinant of personal development, and they note that "Palmore found that the best predictor of longevity was job satisfaction." The so-called "spillover" argument is that workers' feelings about their jobs may generalize to other life roles, with a dissatisfied worker for the most part becoming a dissatisfied citizen. (The opposite view, that people bring "a diffuse social malaise" to work, amounts to the same thing; for disenchantment has to start somewhere and work is still for most individuals the primary means by which they experience and participate in the larger society.) Harvey Swados puts it in more alarming terms: "the explosive potential of this discontent has the capacity to destroy the fragile facade of American democracy."

Not everyone agrees on the seriousness of the problem. Some believe it is being reduced to the level of a fad. "Alienated workers," says Newsweek, "are the newest darlings of the social scientists." Levitan and Johnston in their book, Work is Here to Stay, Alas!, seek to defuse alarmists:

The evidence of deteriorating work attitudes consists of surveys revealing declining work satisfaction, stories of individuals "dropping out" of society, and industrial reports of sabotage, absenteeism, job quitting, and strikes over working conditions. The hard data offer little support to the argument that work attitudes have undergone an upheaval.

Based on a careful review of seven national job-attitude surveys, Robert Quinn concludes: "In spite of public speculation to the contrary, there is no conclusive evidence of a widespread, dramatic decline in job satisfaction." (Quinn, 1974)

Most observers, however, consider these "hard data" no more reliable than the "impressionistic" reports of journalists. Harry Braverman (1974) more or less dismisses them as "the feeble results of questionnaire sociology." In the first place, social scientists do not yet know how to measure the kind of dissatisfaction expressed in Nora Watson's statement: "most of us...have jobs that are too small for our spirit. Jobs are not big enough for people" (Terkel, 1974). As O'Toole and many others point out, "there is no index of 'healthy' or 'unhealthy' job satisfaction as reliable as the 98.6° on a thermometer." Quinn himself identifies two kinds of shortcomings with the surveys from which most data are derived. The first is that they fail to take into account the fact that different job-satisfaction measures have different points at which discontent begins to register. In examining the questionnaires he found that:

- ° More dissatisfaction is reported when workers are asked whether they enjoy their jobs than when "satisfaction" with the job is asked about specifically.
- ° More dissatisfaction is reported when the question concerns another — even a hypothetical — worker than when the question focuses on the respondent.
- ° More dissatisfaction is reported when the question raises the (hypothetical) issue of the worker's reliving his or her life than when it directs attention to the worker's present reaction to the job.

- More dissatisfaction is reported when workers are invited to consider attractive alternatives to their present jobs than when they are asked for their reactions to their present jobs on a noncomparative basis.
- More dissatisfaction is reported when permissible answers to a question include several degrees of dissatisfaction (and especially a response alternative reflecting ambivalence or indifference.)

These patterns, says Quinn, lead to one important conclusion:

that the two most frequently used subjective measures of job satisfaction, "All in all, would you say you are satisfied or dissatisfied with your job?," and its variant, "On the whole would you say you are satisfied or dissatisfied with the work you do?" produce the highest estimate of satisfied workers. (Quinn, 1974)

The second and more obvious problem with questionnaire findings is that they make no allowance for the many reasons why workers may not be willing or able to admit discontent — e.g., fear that it would reflect poorly on their decision-making abilities; anxiety about the questioner's motives and the confidentiality of the survey; and the kind of numbness that accompanies what Kornhauser (1965) calls "dwarfed desires and deadened initiative."

Thus the evidence, as thoughtful observers like George Strauss (1974) conclude, is fragmentary and confusing. But whether discontent is actually increasing or merely becoming more visible, the debate over dissatisfaction has helped convince a great many observers that "the mood toward work in America is changing." People don't feel and think about work the way they used to. "The traditional ideologies used to explain the place of jobs and employment no longer command belief." (Green, 1973) Most efforts to fathom this change begin with the question, What's happened to the Work Ethic?

The Concept of Work Ethic

Since Max Weber fully explored its role in the genesis of capitalism, the so-called Protestant ethic has come to signify the social and moral view of work said to have dominated America from colonial times to the present. Distilled by Sebastian de Grazia (1962) as "the abiding notion that work is somehow the right and moral thing to do," it was:

eagerly adopted by society as it expanded and entered the era of mass production. Because the efficiency of developing industries relied upon willing and diligent labor, every agent of authority and education proclaimed the merit of work values throughout the several hundred years following the Reformation. From Luther to Ben Franklin and Horatio Alger, workers received a steady diet of exhortation and incantation from press, pulpit, and primer. All work was laudable, work well done would inevitably bring reward, work shirked led to degradation and ruin. (Levitan and Johnston, 1973)

But trying to gauge attitudinal change in terms of adherence to the work ethic is difficult. First, many believe that its actual effect in shaping conduct has been obscured by a lot of theoretical embroidering — the "wool-spinning pastime" of clerics and intellectuals. "It is not clear whether the moralists' praise of work was ever accepted by the working man, or how much it actually motivated work." (Levitan and Johnston, 1973) Daniel Bell (1962) insists that Max Weber has "beguiled" social science, and de Grazia (1962) says flatly, "among workmen the work ethic never existed."

Second, its meaning is protean. As conceptually applied, the "work ethic" refers to a kaleidoscopic set of beliefs and attitudes that shift with the focus of the observer. McMichael, for instance, claims there has always been confusion between two kinds of ethics: the bourgeois, middle class ethic of frugality, investment and deferred gratification; and the one they in turn imposed on the working class, which "stressed obedience, conformity and docility." (McMichael, 1974) Kenneth Hoyt (1973) calls this latter the "industrial work ethic." To Yankelovich (1974) the work ethic is a cluster of "cultural themes" by which people link work with their life values: The *Good Provider theme* — according to which masculinity is ultimately derived not from prowess but from being a "breadwinner"; the *Independence theme* — "stand on one's own two feet"; the *Success theme* — "hard work pays off"; and the *Self-Respect theme* — a man's inherent worth is reflected in the act of working hard at something and doing it well. In popular usage, the work ethic ranges in connotation from meek subservience to authoritarian capitalists, to a lingering and enabling faith in self-reliance. In acknowledging this multiplicity, Hoyt and others recommend that the concept of *work ethic* be replaced by the concept of *work values*, which Pennings (1970) defines as "constellations of attitudes and opinions with which an individual evaluates his job and work environment, and they may be either intrinsic or extrinsic."

Nature of the Change

As observers like Alvin Toffler and David MacMichael have pointed out, the work ethic transmitted by the school has tended to be that ethic most appropriate for the existing state of the economy. According to MacMichaels' formulation:

The industrialization process that required of the educational system first more and more properly disciplined and subordinated workers, and then masses of managers and professionals, seems to be coming to an end. (MacMichael, 1974)

As the speed with which post-industrial change accelerates, we face the problem of a partial moral vacuum, and no one seems able to say with assurance what sort of ethic is appropriate to the economic and social phase we are entering. Commentators speak vaguely of "the emerging values system" (MacMichael 1974) and "a search for the restoration of a *relevant* work ethic" (Sheppard & Herrick, 1972). Kenneth Hoyt (1973) says the industrial work ethic has eroded "and a post industrial work ethic has yet to develop." Louis E. Davis (1971) claims "the new technology is ushering in a new system of social and organizational values," and can only suggest what the new values might be through an undefined list of opposing abstractions:

<u>From</u>	<u>Towards</u>
Achievement	Self-actualization
Self-control	Self-expression
Independence	Interdependence
Endurance of distress	Capacity for joy

The extent to which values seem "up for grabs," as one observer put it, is suggested in the loose way the term itself is bandied about: one reads of an "anti-work ethic," a "leisure ethic," a "work-success ethic," a "play ethic," an "avoidance ethic," a "managerial ethic," and so on.

But while the future is uncertain, some fundamental elements of current change can be identified. Complex and highly interrelated, the major cultural trends said to be gradually transforming the attitudes and beliefs that have traditionally comprised the American work ethic may be outlined as follows:

A Climate of Abundance. America's unprecedented affluence appears to have "relaxed the historic work-or-starve law" (Levitan & Johnston, 1973), and created what O'Toole calls a "mañana attitude." The argument is that we have climbed Maslow's ladder to the point where, in Ardrey's phrase, "the hungry psyche has replaced the hungry belly." (1971) As Sheppard and Herrick put it,

"Once a certain level of affluence is taken for granted, this tends to undermine attitudes based on principles of scarcity that one must sacrifice individual expression and growth in order to survive." (1972)

The point is not that poverty or inequity have disappeared — quite the contrary, according to many observers — but that a new climate prevails. As Louis E. Davis (1971) characterizes it, our rapidly expanding technology *appears* to provide limitlessly for material needs and to banish the fear of scarcity. "By eroding the bases for the Protestant work ethic, this capability of technology reinforces the evolving values of self-actualization and self-expression."

The Changing Meaning of Success. During the decades following World War II, Americans shaped their ideas of success around money, occupational status, possession, and the social mobility of their children. It's not that money is becoming unimportant, says Yankelovich, but that "an increasing number of people are coming to feel that there is such a thing as enough money. And this is new." Ivar Berg describes the shift as "a calling into question the worth of competition, of status seeking, and of material consumption." (Berg, 1974) New ideas of success revolve around various forms of self-fulfillment, with an increasing emphasis on work that is challenging, interesting, and "meaningful." Richard E. Walton (1974) distills the change thus: "Whereas the books my parents read in primary school taught them the virtue of hard work and competition, my children's books emphasize self-expression and actualizing one's potential."

A Desire for Autonomy. Concomitantly, a "psychology of entitlement" is spreading, and authority is being challenged in all spheres of society; "the spirit of the times and the prevailing ideology is anti-bureaucratic and suspicious of all hierarchy." (Sheppard and Herrick, 1972) The younger worker especially is "more impatient, less homogeneous, more racially assertive, less manipulable." (Aronowitz, 1973) This new emphasis on self:

modifies the character of the bonds which tie the individual to social institutions — the family, employer, community, church, trade union, political party, nation. No longer can these institutions assume the automatic and "unearned" loyalty of the individual. The willingness of people to subordinate themselves unquestioningly to some larger entity for the sake of an implicit common good is slowly disappearing. (Yankelovich, 1974)

People want "greater participation in the design of work and the formulation of their tasks."

A Challenge to the Cult of Efficiency. What Kenniston calls the "triumph of cognition" in our technological society has subordinated human emotions to utility in the inexorable process of rationalization, bureaucratization, and systematization. "Passion, intuition, idealisms — inner needs and drives considered by many societies the central rationale for human existence — have been displaced by objectivity — analysis, reduction, measurement, comparison, and empiricism." (Kenniston, 1960) Or, in Roszak's view, "the expertise we bow before derives from a diminished mode of consciousness." A new concern for "personal authenticity," spontaneity, "faithfulness to experience" is seen as rejecting this rationalizing mode. "In the past few years, a questioning of the values of efficiency has begun to reach beyond the confines of the counter-culture." (Yankelovich, 1974)

Increasing Career Mobility. While career change used to be considered a "failure" of sorts, job proliferation and obsolescence and the problems of choice and satisfaction are causing a shift away from the long-standing notion of a "calling" or the view that "from among literally tens of thousands of job possibilities, a person must select *the one* which seems best suited to his talents, motives, needs, feelings, values, and background." (Kenniston, 1960)

The Widening Gap Between Work and Leisure. The fundamental tendency toward fragmentation has gained momentum since the Industrial Revolution and has created the "mechanization and spiritual isolation of modern society" and its "malaise of specialization." Mumford reaches into the unverifiable past for an ideal version of pre-industrial unity:

village culture...where work, even hard work is rarely divorced from rhythm, song, human companionship, and esthetic delight; where vital activity is counted as great

a reward of labor as the product; where neither power nor profit takes precedence over life; where the family and the neighbor and the friend are all part of a visible, tangible, face-to-face community... Every member of the community had access to the entire cultural heritage, and could ordinarily master every part of it...work and play, religion and education were united. (Mumford, 1934)

Historian Adriano Tilgher puts it less romantically. The idea that work should be a creative fulfillment is peculiarly modern, he points out, and no doubt results from the increasing failure of traditional institutions to supply life meaning, since "uninteresting" work is no longer highly integrated with and absorbed by other aspects of society — ritual, religion, family, communal activity, and the like. (Tilgher, 1958) But however conceptualized, a "radical separation" of work and the rest of life is said to be intensifying, while "'free time' is increasingly burdened with moral functions formerly performed by the institutions of work." (Berger, 1963)

Implications — Some Problems and Issues

The role of schools in dealing with the question of values is seen as debatable. One view is that schools can do little. Schools do not initiate or guide moral change; rather, they serve to legitimize and perpetuate already existing values of the dominant power structure. (Bowles and Gintis, 1976) On the other hand, while education is "not a useful instrument for transforming basic social institutions" (Green, 1973), it can indirectly bring about change. For example, the "liberal" curriculum of the sixties is seen as a major source of unrest by inculcating false expectations of "meaningful" work:

If the upper-middle class critics succeed in further reforming schooling to stimulate active learning in the "open classroom" and through teaching by dialogue, the effect will be to create an even greater tension between the mechanized workplace and the characters of the workers. (Maccoby, 1972)

Galbraith (1971) casts the same idea in larger terms. The "greatest single source of tension in the industrial state," he claims, is the "conflict between the individualist ethic of the academic community and the need in the industrial system for a disciplined acceptance of the goals of organization."

Some believe education must help guide values change. Kenneth Hoyt postulates that "at least four elements must appear in the new work ethic which philosophers must develop and teachers must teach: the values of volunteer activity, the dignity of all workers, the satisfactions of human services, and the necessity of careers based upon multiple occupations." (Hoyt et al. 1972) But the prevalent trend seems to be to let "the young person choose his own ethical system, with a little help from the schools on how to choose wisely." (O'Toole, 1973) The question currently facing education is what "a little help" should consist of. If it is to go beyond the level of administering work values inventories and the like, it must deal less superficially with such difficult questions as status, purpose, roles, and leisure.

According to job attitude surveys, one of the core ingredients of job satisfaction for the majority of people is status, and many observers believe that a critical source of discontent is a "caste system" which assigns prestige to a narrow range of jobs. David MacMichael contends that the schools, as essentially middle-class institutions, have transmitted a class bias toward white-collar jobs and professions. Through methods "more exemplary than curricular," they have deprecated the value of work not requiring extended education, encouraging "a false worship of the baccalaureate," and nurturing the American disdain for manual occupations and what Terkel calls the "put-down of craftsmanship."

But "education and its credentials are raising expectations faster than the economic system can meet them." More and more college graduates cannot find jobs in the professional and managerial fields for which they have prepared. Concomitantly, there are signs that increasing numbers of young people are rejecting status and success as defined by middle class standards, (not just in such "dropout" examples as "street culture" panhandling or the growth of communes, but of college graduates choosing subsistence level jobs in the "preference for more leisure over more pay"). The notion of hierarchical authority, which has traditionally played a central role in defining status, appears to be attenuating: "both the exercise of authority and the receipt of deference from others are now being increasingly viewed as embarrassing and to be shunned." (MacMichael, 1974)

As an antidote to growing indifference, and to counter the sexual, racial, and Archie Bunker stereotypes of work current in popular culture, one view is

that education must take the corrective course of "leveling out" the class-based and undemocratic bias for white collar jobs by inculcating or "reinstating" the notion that "there is dignity and worth in all work" whether it be menial or exalted, and that "every person should have pride no matter what his role." But for many observers, this is a dangerously misleading view — even when amended to "all *workers* have dignity" — and it reaches to the heart of our present values dilemma. "This educational approach," argues Thomas Green (1973), "is not only dysfunctional, but positively cruel in a society where many jobs that need doing cannot possibly provide a sense of self-identity or a central life interest." Or as Paul Goodman put it in Growing Up Absurd: "There are fewer and fewer jobs that are necessary and unquestionably useful... and that can be done keeping one's honor and dignity."

"Alienation" has been used by writers from Marx to Fromm as an explanatory concept for the unprecedented sense of estrangement that pervades modern society. Robert Blauner, in his highly esteemed study, Alienation and Freedom, sought to identify the "object conditions" of alienation, which he defines in general terms as follows:

Alienation exists when workers are unable to control their immediate work processes, to develop a sense of purpose and function which connects their jobs to the overall organization of production, to belong to integrated communities, and when they fail to become involved in the activity of work as a mode of personal self-expression.

The need for control, purpose, social integration, and self-involvement, if insufficiently met, become four types of alienation: powerlessness, meaninglessness, isolation, and self-estrangement. Applying these categories to industry, he concluded that *craft technology* (e.g., printing) is less alienating than *machine-tending* technology (e.g., the textile industry), which is less alienating than assembly-line technology. (Blauner, 1964) To many observers, especially psychologists, the effects of alienating work make catechisms about dignity seem naive at best. Adapting to the highly regimented, impersonal megamachine, says psychologist Michael Maccoby, tends to be costly: it produces the authoritarian personality on the one hand, and schizoid apathy on the other.

A major source of growing concern, of course, is the widely-held view that alienation, as Blauner defined it, is no longer confined to its archetypal

settings, industry, but is becoming prominent in white collar occupations, where one hears of "paper pushers" and "data coolies." To the extent that their skills can be routinized, managers and professionals are increasingly subject to "Taylorism," which "tends to weaken further a moral commitment to work." (Berger, 1963) As Davis and Cherna (1975) put it, "independence has gone out with inefficiency, and pressure has come in with productivity." Kenniston (1960) notes the parallel between the characteristics of a good worker and a good machine:

Whether at high levels of management or on the most menial assemblyline tasks, the good worker is highly specialized, is expected to show few feelings, to operate "by the book," to be consistent, systematic, and precise...and finds the most important parts of himself systematically ignored.

Career education has recently been criticized for being "not directed toward changing the occupational and economic structure," and for ignoring:

"mounting evidence that the particular jobs available in advanced capitalist economics lack the moral qualities attributed to work generally. In fact, most work is boring. In its unvaried routine, the simplicity of most tasks and the constant supervision characteristic of hierarchical settings all deny workers a sense of competence and a feeling of responsibility." (Grubb and Lazerson, 1975)

According to Levitan and Johnston, the problem is not that all jobs are alienating, but that there are not enough intrinsically rewarding jobs to go around, and:

all the redesign in the world cannot turn dull tasks into exciting ones, or inject meaning into meaningless jobs. (Levitan & Johnston, 1973)

Ivar Berg believes that work still occupies a central place in the lives of most Americans but that "the legitimacy of the 'system' — what and whom one works for — is much in doubt." In Thomas Green's view, Americans are not alienated from work, but rather from the *institutions* of work. Both are referring to the fact that in a variety of ways a sense of moral and social purpose is increasingly problematic in our society.

Terms like "built-in obsolescence," "commodity junkies," and "throw-away culture" reflect an increasing awareness that "the product may be as alienating as the process." According to economists Bowles and Gintis (1976), the

imperatives of profit are a primary cause of the increasing discrepancy between jobs and expectations:

The waste and irrationality which characterize production under corporate capitalism also limit the opportunities for rewarding work. The alienated white-collar worker lacks a personal identification with the product of her or his labor not simply because the product is owned by the capitalist, but because, in many cases, the product does not meet any real human need.

The traditional refuge of pride in one's personal performance (reflected in sayings like "a task worth doing is worth doing well," and "an honest day's work for an honest day's pay") is thus undermined, as Cass (1965) and others have shown, when the work itself appears to lack any genuine social value or usefulness. In his discussions of unions Aronowitz (1974) maintains that the expectations of young workers of the ability to perform socially useful services to the community "seem a betrayal where the object of labor appears wasteful at best, and even oppressive to some." As Bennett Berger (1963) puts it, "a culture which has not learned to honor what it is actually committed to produce creates an uneasy population," the feeling, in Terkel's phrase, of being "no longer needed in a world of needless things."

While Levitan and Johnston remind the humanists that "virtually every measure of workers' behavior indicates that money is still dearest to the hearts of most workers," others claim that in part what our society is experiencing is a disillusionment with capitalism itself — a calling into question of some core values that have been taken for granted since the Civil War. Until fairly recently in our history, the great capitalists were frequently considered heroes. What enabled them to centralize economic control into the hands of a corporate elite "with such cheerful and unstinting rapacity," says historian Richard Hofstadter, was the popular faith in the myth of opportunity for the common man. The competitive individual with his absolute right to private property served his fellow man by seeking his own profit. But such things as the environmental crisis and what Ivar Berg calls a "grim litany of corporate rip-offs and political deception" has led to an increasingly cynical awareness of the fact that, as Michael Harrington (1966) puts it, "production decisions are reckoned in terms of private advantage without reference to social consequences," and that the executive, no matter how responsible, "is paid for making money and not for guiding technological change in a humane and decent way."

While the conceptual terms have shifted from moral to psychological, from duty to fulfillment, the core notion persists that work, productive activity — as opposed to hedonism or idleness — is personally beneficial. Work for most people is still a basic, "almost irreplaceable" means of coming to terms with themselves and their world, of carving out what Freud called their "portion of reality." It is precisely because "work plays a crucial and perhaps unparalleled psychological role in the formation of self-esteem, identity...sense of order and mastery over self and environment" that the nature of much modern work is considered alarming.

Ernest Becker sees the problem of purpose — identity, self-esteem, and role options — now confronting young people as a crisis in the largest possible terms. Man's "sense of self-worth, his need to feel himself an object of primary value, of ultimate usefulness to creation," is what Becker calls (adapting the term from William James) the quest for "Heroism." He concludes:

The crisis of modern society is precisely that the youth no longer feel heroic in the plan for action that their culture has set up...the plain debasing and silly heroics of the acquisition and display of consumer goods, the piling up of money and privileges that now characterize a whole way of life. (Becker, 1976)

Bennett M. Berger, slightly more optimistically, views the problem as a kind of societal values lag. Our social structure, he says, has created "longer adolescence, more years in retirement, and assembly-line jobs, but our value system contains no moral rhetoric with which to confer honor on these phenomena." Much of the behavior and many of the roles required by our changing social structure cannot be justified by our traditional values: "Consider the strain on our moral vocabulary if it were asked to produce heroic myths of accountants, computer programmers, and personnel executives." (Berger, 1963) Goodman (1960) is more caustic: "Consider the men and women in TV advertisements...they are clowns and mannequins...alternately they are liars, confidence men, smooth talkers, obsequious, etc., etc.,..." Berger's conclusion is that "unless norms can be found within our value system to celebrate bureaucratization, the withdrawal of motivation and the disengagement of self from work is likely to continue."

There is a growing view that it will not suffice to acknowledge in our curriculum that satisfaction means different things to different people, but that education must arm young people with more explicit conceptual tools for

dealing with the fact that alienating jobs exist. Thomas Green (1973), for instance, argues that education must acknowledge that "in the modern world increasing numbers of people are not able to find any kind of central life interest or life work in their jobs," and recommends for modern education "the observance in thought and practice of a clear distinction between *work* as durable, meaningful activity, *labor* as necessary toil, and *job* as what one does for pay."

Whether one accepts the utopian view of increasing automation that man:

will no longer need to do work in the pejorative sense — the unending, bone-wearying, soul-starving toil... Instead he will be free to do the work that a robot cannot do, and which expresses his own humanness — to build, carve, paint, write, act, design, to recover the charm of craftsmanship in an atmosphere of freedom (Krazberg & Gies, 1975)

or the more skeptical one:

The evolution of the postindustrial economy has clearly not resulted in a "quality of work revolution." ...millions of dull factory jobs remain, and millions of equally dull office jobs have been lately added to the job market... Most jobs are and will remain dull and uncreative (Levitan & Johnston, 1973),

it is clear that this society is "faced with a redefinition of leisure," because as Green puts it, "people are increasingly turning to nonworking life for values and identity." Blauner says, "The time, energy, and resources now available for them are causing other aspects of life to compete with work for emotional loyalties and commitments." Already less than half the work force produces all essential goods and services, prompting Davis and Charns to ask, "in a world that does not need everyone in the labor force, why worry if some want to opt out of work altogether?" Lee Braude, in a sociological analysis of work, concludes that the "specialization through segmentation" that characterizes modern work may be "inherently antagonistic to the achievement and maintenance of personal and social well-being," and asks:

How much ought we to rely on occupational behavior as a source of self-actualization or personal fulfillment? Perhaps all that can be asked of work is that it gives us the means to "get our kicks" elsewhere. (1975)

This so-called "instrumental" or "compensatory" view of work is complex, and there is little agreement about its practicability or consequence. Faunce and Dubin (1975) argue that if a low investment in work allows people to invest more of themselves in out-of-work activities, "then there is much to be said for not involving them further." Blauner maintains that the need for control, challenge, and creativity is to a considerable degree conditioned by education, and that:

The average manual worker and many white-collar employees may be satisfied with fairly steady jobs which are largely instrumental and non-involving, because they have not the need for responsibility and self-expression in work.
(Blauner, 1964)

Many observers argue that this non-involving instrumental view is the inevitable norm and cite examples of workers refusing additional responsibility, or resenting job enrichment efforts that cut into their "daydreaming time" or "underground" social system. Samuel C. Florman (1976) asks:

Are there not many workers who do not want responsibility, who prefer the comfortable monotony of routine tasks to the pressure-building process of making decisions and being accountable for the consequences?

He concludes that the work enrichment movement is "running counter to another trend, the seeking of inner peace rather than ego fulfillment... One can wonder who has the better of the bargain, those who are in the rat race or those who are 'beneath' it."

On the other hand, Michael Maccoby warns that the compensatory theory "ignores the probability that to be creative in leisure while mindless and passive in work demands a schizoid attitude." Studies have shown that increased participation in decision-making at work has been accompanied by increased participation in local politics and community activities. Davis and Cherns argue that it depends on the individual. If a low investment in work impairs people's ability and motivation to invest themselves in other activities, "there is reason to be concerned about a purely instrumental orientation towards work." They conclude that "both hypotheses are correct, but for different people."

The need to explore and redefine the meaning of leisure (as opposed to "recreation" or "play") becomes inseparable from the need for a broader interpretation of what constitutes useful, productive activity:

Perhaps it is time the "work ethic" was redefined and its idea reclaimed from the banal men who invoke it. In a world of cybernetics, of an almost runaway technology, things are increasingly making things. It is for our species, it would seem, to go on to other matters. Human matters. Freud put it one way. Ralph Helstein puts it another. He is president emeritus of the United Packing House Workers of America. "Learning is work. Caring for children is work. Community action is work. Once we accept the concept of work as something meaningful — not just as the source of a buck — you don't have to worry about finding enough jobs." (Terkel, 1972)

Many believe this redefinition is already occurring and is itself the major source of a sense of dislocation pervading all advanced industrial societies:

When society needs change in such a fundamental aspect as its definition of work, upon which all its institutions have been built, it is bound to suffer an intense and prolonged crisis, a condition of anomie. (David & Cherns, 1975)

Summary

What implications for an examination of career education materials may be drawn from the picture of modern work depicted above?

Because ours is "a changing society in which the place of work life is no longer clear," what emerges from the literature is not a collectively sanctioned view of work, nor a recommended set of work values, considered essential for young people in today's society. And there is little agreement about whether or how schools should attempt to inculcate specific values, beyond the general inclination to promote an affirmative view of work.

What does emerge from this review are a number of trends, issues, and problems that any educational treatment of work values must accommodate. Many fundamental aspects of the traditional work ethic appear no longer tenable, and a range of possibilities and uncertainties arise. Some major trends have been identified: emerging new definitions of success and status, a growing psychology of entitlement, more flexible male-female role definitions, an increasing emphasis on personal autonomy and authenticity. At the same time, there is considerable evidence that many of these trends are in conflict with the nature and organizational structure of modern work. The alienating, unrewarding aspects are increasingly becoming part of the public consciousness.

While the majority of observers feel the need to shore up a sagging faith in work, few believe it can be done by fiat. Most believe it likely to result only from basic changes in the nature and organization of modern work, and in the development of new attitudes towards such things as leisure, how identity is formed, and standards of personal worth.

In the meantime, it would seem that education's minimal task is to help young people understand and cope with these trends — particularly as they involve the difficult questions of status, dignity, role identity, purpose, and leisure — and to do so in a conceptual language sufficiently sophisticated to accommodate the real dilemmas of meaning and satisfaction in the modern world of work.

ANALYSIS OF CAREER EDUCATION MATERIALS

SAMPLE OF MATERIALS

Career education materials were analyzed for content regarding work-related values and attitudes. The 107 items comprising the sample were selected largely on the basis of accessibility, most of the items coming from the Far West Laboratory library and the extensive collection maintained by the California Department of Education.* To provide a basis for generalizing from the sample to the large body of career education materials available to the schools,** items were selected to ensure variation in *types* of material, classes of *developer*, and *levels* of schooling. (These categories are defined and the sample structure described on the following pages.)

Because the documents were not randomly selected, and because the sample is relatively small, generalization of the results of this analysis may be severely limited. However, the resultant range of types, developers, and levels contained in the sample suggest that the findings reported here may be representative of a broader set of materials and not strictly limited to the particular items that were studied.

The sample included scripts of four filmstrips; otherwise the sample consisted of strictly printed materials. The following categories of items (hereafter called documents) are represented in the sample:

* We are grateful to Robert J. Darling of the California State Department for making available the facilities of the California Career Education Resource Center in Sacramento.

** In a recent survey by the American Institutes for Research (1976) approximately 3,000 titles published after 1971 were identified.

- Types:
- I. Program planning documents, in most cases containing statements of learning goals.
 - II. Student texts, workbooks, and filmstrips.
 - III. Teachers' guides, guidance manuals, and infusion materials.
 - IV. Student assessment instruments.

- Developers:
- A. Commercial.
 - B. Federal, state, and county agencies and colleges and universities.
 - C. Local districts and schools.

- Levels:
1. Elementary.
 2. Secondary.
 3. Unspecified or mixed elementary and secondary.

Table 1, on the following page, shows the numbers of sampled documents in each of the categories defined above. About 60% of the sample is directed to teachers, counselors, and other curriculum planners (types I and III) while student-oriented materials (types II and IV) represent about 40% of the 107 documents. Also, the sample contained about twice as many secondary materials (level 2) as elementary (level 1). The sample is fairly evenly distributed among developers, with commercial (class A) slightly dominant.

A complete listing of the 107 sample documents is shown in Appendix A. The dates of publication range from 1963 to 1976. Fifty-two documents (49% of the sample) were published after 1972; five appeared prior to 1970. Eighteen (17%) are dated 1975 or 1976.

TABLE 1

SAMPLE FREQUENCIES AND PERCENTAGES BY
DOCUMENT TYPE, DEVELOPER CLASS, AND EDUCATIONAL LEVEL

Type of Document	Class of Developer									Totals by Type	
	A. Commercial Publisher			B. Federal, State, County, College			C. Local District or School				
	Level			Level			Level				
	Elem	Sec	Mix	Elem	Sec	Mix	Elem	Sec	Mix	n	%
I. Planning Materials					1	3		1	4	9	8.4
II. Student Materials	2	16	1	1	1	1	2	4		28	26.2
III. Teacher/ Counselor Materials	5	3	3	7	13	2	9	7	4	53	49.5
IV. Assessment Instruments	1	9	3		4					17	15.9
Totals by Developer	n		%	n		%	n		%	Total	
	43		40.2	33		30.8	31		29.0	Sample	
Totals by Level	1. Elementary			2. Secondary			3. Mixed			n	%
	n		%	n		%	n		%		
	27		25.2	59		55.1	21		19.6	107	100

METHOD OF ANALYSIS

Content Excerpts. Each document was searched for content that appeared to state or imply something about work-related values, attitudes, or habits. Material was interpreted liberally to include for further analysis all passages that might even remotely bear on the meaning of work, determiners of success and satisfaction, rights and obligations of workers and employers, or other topics related to work-value systems.

The 107 documents yielded 1,676 excerpts provisionally judged to be relevant to work-related values and attitudes. An excerpt might be a short sentence, such as "There is dignity in all work," or an assessment item such as "Work is dull and unpleasant (false)," or it might be a full paragraph running to 400 words. We attempted to retain sufficient context to permit a valid judgment of the author's intent.

Value Categories. A set of categories was constructed for use in classifying the excerpts according to the content they convey, i.e., to judge what specific attitudes, values, or habits each excerpt transmits to the reader. The objective in developing the categories was to ensure that the content of the set would accommodate the broad range of messages that the documents seemed to contain, as derived from what we had already learned about the documents through the excerpting process. Composition of the categories was also influenced by our earlier review of published literature so that the results of this analysis could be related to that information.

A set of 32 value categories were used initially for classifying the excerpts. Categories were added by the judges, who were instructed to compose additional categories during the classification process (described below) whenever they judged the content of an excerpt to fall outside the existing categories. A new category was retained in the set only if at least two judges composed the same new category for the same excerpt. The resultant set of 49 value categories by which the 1,676 excerpts were classified is displayed on the following page. For each category, a short statement is shown in capital letters, followed by an elaboration where appropriate. In the remainder of this report, the short statements are used to identify categories.

EXHIBIT 1: VALUE CATEGORIES

1. PEOPLE WORK FOR MANY DIFFERENT REASONS.
2. THERE IS DIGNITY IN ALL WORK; all types of work are important to society and deserve respect; people depend on one another for goods and services.
3. PEOPLE WORK TO EARN A LIVING, to be independent, to provide themselves and their families with the necessities of life plus whatever their income will enable them to enjoy.
4. PEOPLE NEED TO BE PRODUCTIVE, to make a social contribution, to do something of value to others.
5. WORK CAN BE PERSONALLY SATISFYING, enjoyable, or rewarding.
6. WORK IS EXPECTED OF EVERYONE.
7. NOT EVERYONE CAN BE EXPECTED TO WORK due to unavailability of jobs, incapacity to work, etc.
8. CHOICE REQUIRES MATCHING SELF AND JOB. Compatibility of work with values, interests, abilities crucial to success and satisfaction.
9. MAY SUCCEED IN MANY DIFFERENT JOBS.
10. JOBS HAVE ADVANTAGES AND DISADVANTAGES; compromises or tradeoffs are usually necessary.
11. EXTERNAL FACTORS INFLUENCE CHOICE, e.g., geographical, social, economic conditions, and personal circumstances.
12. CHOICE EVOLVES THROUGHOUT LIFETIME; as workers develop their values, needs, interests and abilities through work experience, they can more wisely choose satisfying work.
13. SUCCESS REQUIRES ADJUSTING TO JOB, satisfying employer, e.g., dependable, loyal, punctual, well-mannered.
14. SUCCESS REQUIRES SELF-RELIANCE, initiative, creativity, responsibility, possession of problem-solving and decision-making skills.
15. SUCCESS REQUIRES INTERPERSONAL SKILLS, the ability to get along with people.
16. SUCCESS REQUIRES ADAPTABILITY, flexibility, willingness to continue learning.
17. SUCCESS REQUIRES HARD WORK.
18. HARD WORK MAY NOT LEAD TO SUCCESS; success requires competitiveness or aggressiveness.
19. PEOPLE VARY IN DEGREE OF SATISFACTION.
20. EXTRINSIC FACTORS AFFECT SATISFACTION, e.g., wages, security, working conditions or environment, work hours or schedule, job location, opportunity for advancement, relationships with co-workers.
21. INTRINSIC FACTORS AFFECT SATISFACTION, e.g., meaningfulness of job, interest, challenge, variety, opportunity for personal achievement, creativity, continued learning, autonomy, status, opportunity to participate in management, opportunity to be of service to others.
22. SOME ASPECTS OF ANY JOB ARE UNPLEASANT, unrewarding, or drudgery.
23. SOME JOBS ARE DEGRADING, unnecessary, or dehumanizing.
24. WORKER SHOULD INFLUENCE NATURE OF JOB, working conditions or environment.
25. LEISURE CONTRIBUTES TO SATISFACTION; leisure activities may compensate for lack of satisfaction in work; leisure activities may become careers.
26. WORK IS THE MAJOR ACTIVITY IN LIFE.
27. TYPE OF WORK AFFECTS WHOLE WAY OF LIFE, i.e., family, social, cultural and leisure roles.
28. IDENTITY AND STATUS COME FROM WORK.
29. SUCCESS ENHANCES SELF-ESTEEM and self-respect.
30. WORK CAN ADVERSELY AFFECT ONE'S HEALTH.
31. SUCCESS IN WORK EQUALS SUCCESS IN LIFE.
32. LIFE SATISFACTION REQUIRES LIKING WORK.
33. SATISFACTION IN ONE'S WORK ESSENTIAL.
34. SATISFACTION IN ONE'S WORK DIFFICULT to achieve.
35. WORK MAY BE A MEANS TO OTHER ENDS such as satisfying leisure activities, and therefore may require postponement of gratification.
36. EDUCATION AND TRAINING ARE IMPORTANT; amount of education and training influences employability, success, or satisfaction.
37. WORK SATISFIES PSYCHOLOGICAL NEEDS.
38. SATISFACTION COMES FROM PRIDE IN WORK.
39. INDIVIDUAL FREE TO CHOOSE OWN CAREER, and should not be artificially constrained by race, sex, or class. Each individual should have the opportunity to develop to his or her fullest potential.
40. JOBS SHOULD ACCOMMODATE INDIVIDUALITY. Everyone has unique contribution to make to society through work.
41. SOMEONE MUST WORK FOR ALL WE HAVE. Work is necessary to the individual or society.
42. SELF-ESTEEM CONTRIBUTES TO SUCCESS and satisfaction.
43. SUCCESS REQUIRES COMMUNICATION SKILLS.
44. FEW WORKERS IN ANY FIELD EXCEL. Most jobs require only satisfactory work.
45. REWARD IS A FUNCTION OF PRODUCTIVITY, skill, or service.
46. PEOPLE DO WELL WHAT THEY ENJOY DOING. Satisfaction with one's job increases worker productivity and likelihood of achieving job success.
47. UNIONS NEEDED TO PROTECT WORKERS.
48. MANY EXPECT TOO MUCH OF THEIR JOBS.
49. COLLEGE NOT NECESSARY TO SATISFACTION. Jobs that require college education not only ones respectable or satisfying.

It may be noted that some of the categories allow for a rather substantial range of content, which results in less analytic precision and subtlety than if the categories were more restrictive. However, the wide range of pertinent content in the excerpts made it necessary to forfeit some desired precision in order to accommodate that range, yet keep the analysis within manageable limits.

Excerpt Classification. Three judges independently assigned the excerpts to value categories. A given excerpt could be assigned to more than one category, since a passage, or even a single assessment item, may contain multiple messages — either directly or by implication.

Assignments by the three judges were compared and any agreement between at least two judges was recorded as a "hit," i.e., that one specific message from the 49 possible messages had been transmitted and received.

There were a total of 1,676 excerpts judged, or a mean of 15.67 per document. Of these, 220 excerpts were classified by the judges as "not applicable" or they failed to achieve agreement by two or more judges. The remaining 1,456 excerpts, each of which did achieve at least one hit, yielded a total of 1,642 hits, or a mean of 1.13 hits per excerpt.

A data record for each of the 107 documents was developed as follows, for input to data analysis: (1) Each of the 49 value categories was examined for hits (assignment of a given excerpt to that category by at least two judges). (2) Where at least one hit had occurred in a given category, a "1" was recorded for that category; where no hit had occurred in a given category, a "0" was recorded. It should be noted that a single hit in a given category had the same effect as multiple hits in that category. That is, a document's redundancy in transmitting a message did not affect its data record — it either transmitted the message or it did not. Thus a document's data record is simply a string of 49 1's and 0's corresponding to the 49 value categories.

RESULTS

As reported above, the three judges produced 1,642 classification agreements, or hits. These hits showed a high degree of redundancy, i.e., messages

tended to be repeated within the same document. Removal of the message repetitions within a single document, as described earlier, yielded a total of 863 hits, or an average (mean) of 8.07 per document. These 863 hits are the subject of this analysis.

The distribution of hits by document is shown graphically in Figure 1. The range of hits is from 1 to 23. Twenty-two of the 107 documents received only 1 or 2 hits, i.e., contained only 1 or 2 of the possible 49 messages. Fifty-three of the documents contained 7 or less, and 54 documents contained 8 or more.

The analysis of data was directed toward three questions: (1) What are the relative frequencies with which the 49 messages occur in the sample? (2) What dependencies or patterns appear between and among the 49 messages? (3) Are there differences in message content between types of documents, classes of developers, and educational levels? The following report of results is organized according to these questions.

Relative Frequencies of Occurrence

Table 2 shows the frequency with which each of the 49 messages occurred in the 107 documents. Message 8 occurred in all but seven documents. All other messages occurred in less than half the documents, with a range of 1 to 46. The mean number of hits per message is 17.6 and the median is 12.

Career Choice. The essence of message 8 is that success and satisfaction in work requires high compatibility between job characteristics and requirements on the one hand, and worker interest, abilities, and values on the other. The value or ethical implications of this message are that the individual is free to make a choice and that a successful choice is dependent on personal knowledge on which the choice is based — knowledge about self and about careers.

Message 8 not only occurred in 93.5% of the documents, but in 9 of them it was the only one of the 49 messages that occurred. It is not surprising that message 8 is a dominant theme in this or any sample of career education materials, since a well established goal of career education is to help the student make good career decisions. Indeed, the value implications of the message could be overlooked, because freedom of choice and individual responsibility tend to be taken for granted in a free society. A more interesting

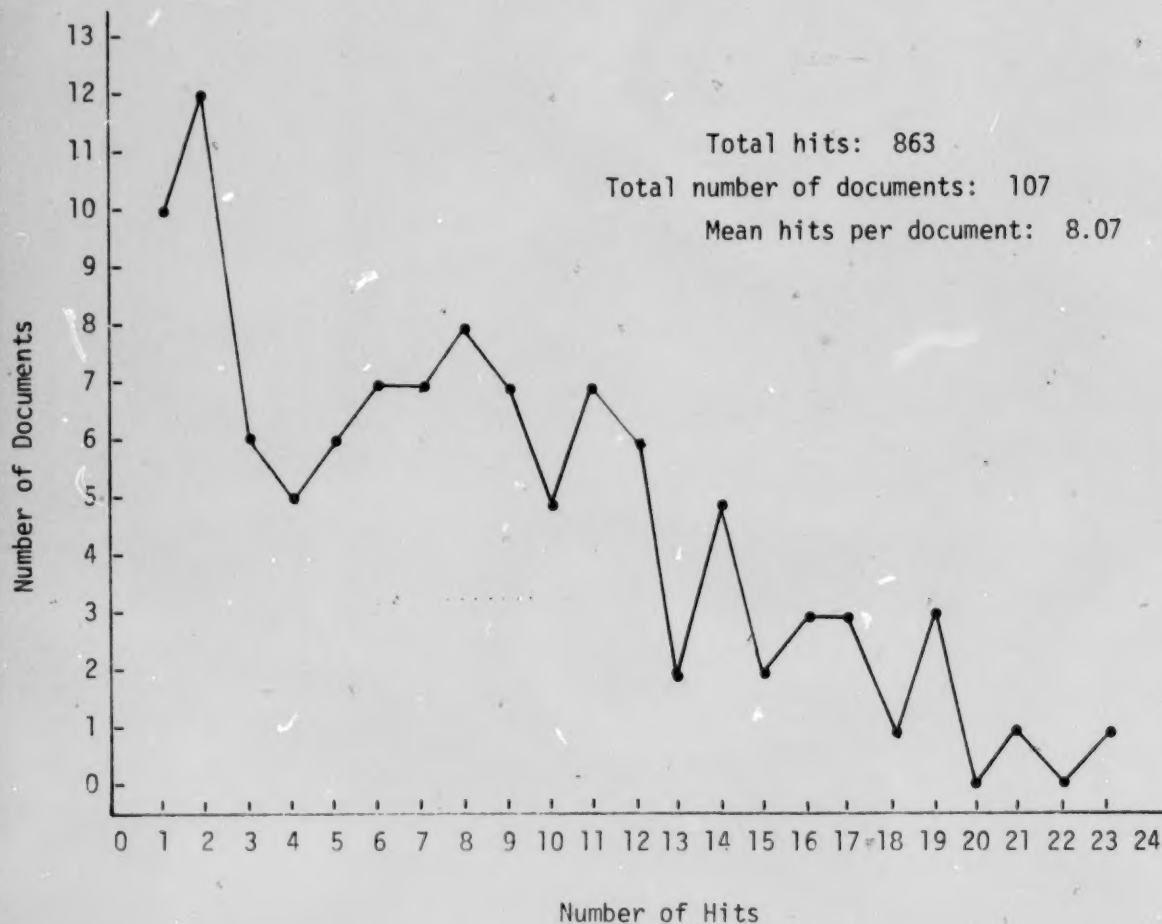


Figure 1. Distribution of Hits

TABLE 2
FREQUENCIES OF OCCURRENCE* OF
49 VALUE MESSAGES IN
107 CAREER EDUCATION DOCUMENTS

Rank	Message Number	Message	Number of Documents	%
1	8	Choice requires matching self and job	100	93.5
2	2	There is dignity in all work	46	43.0
3	12	Choice evolves throughout lifetime	45	42.1
4	13	Success requires adjusting to job	43	40.2
5	1	People work for many different reasons	39	36.4
6.5	3	People work to earn a living	36	33.6
6.5	11	External factors influence choice	36	33.6
8.5	25	Leisure contributes to satisfaction	35	32.7
8.5	36	Education and training are important	35	32.7
10	27	Type of work affects whole way of life	34	31.8
11	15	Success requires interpersonal skills	33	30.8
12	5	Work can be personally satisfying	28	26.2
13	20	Extrinsic factors affect satisfaction	24	22.4
14	10	Jobs have advantages and disadvantages	23	21.5
15.5	21	Intrinsic factors affect satisfaction	21	19.6
15.5	41	Someone must work for all we have	21	19.6
17	16	Success requires adaptability	20	18.7
18.5	9	May succeed in many different jobs	19	17.8
18.5	29	Success enhances self-esteem	19	17.8
20	4	People need to be productive	18	16.8
21	39	Individual free to choose own career	17	15.9
22.5	6	Work is expected of everyone	15	14.0
22.5	14	Success requires self-reliance	15	14.0
24.5	26	Work is the major activity in life	12	11.2
24.5	27	Work satisfies psychological needs	12	11.2
27	33	Satisfaction in one's work essential	11	10.3
27	38	Satisfaction comes from pride in work	11	10.3
27	40	Jobs should accommodate individuality	11	10.3
29	32	Life satisfaction requires liking work	9	8.4
30.5	17	Success requires hard work	7	6.5
30.5	19	People vary in degree of satisfaction	7	6.5
33	28	Identity and status come from work	6	5.6
33	30	Work can adversely affect one's health	6	5.6
33	42	Self-esteem contributes to success	6	5.6
36	22	Some aspects of any job are unpleasant	5	4.7
36	35	Work can be a means to other ends	5	4.7
36	45	Reward is function of productivity	5	4.7
39	18	Hard work may not lead to success	4	3.7
39	43	Success requires communication skills	4	3.7
39	46	People do well what they enjoy doing	4	3.7
42	23	Some jobs are degrading	3	2.8
42	24	Worker should influence nature of job	3	2.8
42	34	Satisfaction in one's work difficult	3	2.8
44	49	College not necessary to satisfaction	2	1.9
47	7	Not everyone can be expected to work	1	0.9
47	31	Success in work equals success in life	1	0.9
47	44	Few workers in any field excel	1	0.9
47	47	Unions needed to protect workers	1	0.9
47	48	Many expect too much of their jobs	1	0.9

* Multiple occurrences of a given message within a single document are treated as a single occurrence; therefore the frequency for a given message equals the number of documents in which that message occurred.

finding is that the more explicit statement of freedom of choice, message 39, occurred in only 17 (15.9%) of the documents. In each of those 17 cases message 8 also occurred.

Message 11 states that circumstances and factors outside the individual may be as important or more important than individual choice in determining what kind of work one does. This might be thought of as a qualifier of message 8 — the imposition of practical constraints on the freedom-of-choice message. Message 11 occurred in 36 (33.6%) of the documents. In 35 of those 36 cases message 8 also occurred.

The Importance and Value of Work. Messages 2, 6, and 41 assert that all work is worthy, everyone is expected to work, and everything we have comes from work. They may be thought of as three versions of a basic message aimed at instilling acceptance of work as a social duty. From Table 2 it can be seen that messages 2, 6, and 41 occur respectively in 43, 14, and 20 percent of the documents. Examination of co-occurrences of these messages reveals that at least one of them occurs in 53 (49.5%) of the documents.

Seven other messages are positive statements of the importance and value of work to the individual. They are messages 5, 26, 27, 28, 29, 31, and 37. When combined with messages 2, 6, and 41, which advocate the importance and value of work to society, we have a set of ten messages that appear to be directed toward instilling "positive attitudes toward work," which is frequently cited as a goal of career education. At least one of these ten messages occurs in 69, or about two-thirds, of the 107 documents.

On the other side of the coin, eight messages are negative or at least cautionary statements about work — all with an orientation toward the individual worker's interests. They are 10, 18, 22, 23, 30, 34, 44, and 48. The most frequently occurring of these messages is number 10, which appears in 23 (21.5%) of the documents. The others occur in from 1 to 6 documents. At least one of these eight messages occurs in 35, or about one-third, of the documents.

Of the 69 documents containing at least one positive message, 28 (40.6%) also contain at least one negative or cautionary message. Of the 35 documents containing at least one negative or cautionary message, 28 (80%) also contain at least one positive message.

Messages 10, 22, and 23, which are included in the negative or cautionary set above, appear to be aimed at introducing the student to some unpleasant realities of work. They assert that most jobs have disadvantages as well as

advantages, most jobs have some unpleasant aspects, and some jobs are degrading. At least one of these messages occurs in 27 (25.2%) of the documents. One or both of the more explicitly negative messages, 22 and 23, occurs in 7 (6.5%) of the documents.

Traditional Work Ethic. The following nine categories reflect various aspects of the traditional work ethic:

	Percent of Documents
2. There is dignity in all work	43.0
4. People need to be productive	16.8
6. Work is expected of everyone	14.0
13. Success requires adjusting to job	40.2
17. Success requires hard work	6.5
20. Extrinsic factors affect satisfaction	22.4
31. Success in work equals success in life	0.9
38. Satisfaction comes from pride in work	10.3
41. Someone must work for all we have	19.6

Eighty-three documents (77.6%) contain at least one of the nine messages above. Half the documents contain from 2 to 5. No document contains more than 5. It may be concluded that traditional values are represented in a substantial majority of the documents; however, the range of these values within a single document tends to be limited.

There are opposing or qualifying value categories for five of the traditional messages listed above. It is therefore possible to form contrasting pairs and compare their frequencies of occurrence. Table 3 summarizes the comparisons for five such pairs. It may be seen from the table that the traditional messages occur more frequently than the opposing or qualifying statements. An exception is the extrinsic-intrinsic pair, which shows a high frequency of co-occurrence and nearly equal total frequencies. It appears that the authors of these materials do not emphasize one kind of reward in preference to the other, but choose instead to make a balanced presentation of the two kinds of rewards that work may offer.

TABLE 3
FREQUENCIES OF OCCURRENCE (IN PERCENT)
OF SELECTED CONTRASTING PAIRS OF
VALUE CATEGORIES

Paired Value Categories	Frequencies of Occurrence (%)		
	Both	Alone	Total
2. There is dignity in all work 23. Some jobs are degrading	1.9	41.1 0.9	43.0 2.8
6. Work is expected of everyone 7. Not everyone can be expected to work	0.0	14.0 0.9	14.0 0.9
13. Success requires adjusting to job 24. Worker should influence nature of job	1.9	38.3 0.9	40.2 2.8
17. Success requires hard work 18. Hard work may not lead to success	0.0	6.5 3.7	6.5 3.7
20. Extrinsic factors affect satisfaction 21. Intrinsic factors affect satisfaction	17.8	4.7 1.9	22.4 19.6

Worker/Employer Obligations. Message 13 states the traditional attitude that stresses "obedience, conformity, and docility," which is central to what Hoyt calls the "industrial work ethic." That message occurred in 43 (40.2%) of the documents, which was exceeded in this sample by only three other messages (2, 12, and 8). This probably reflects a conviction that adjustment to employer demands is a reality of work that students must recognize. In contrast, messages 24 and 40 assert that employers have certain obligations toward workers. Message 24 states that workers should have some influence on the nature of their jobs and their working conditions. Message 40 states that jobs should be designed to accommodate individual characteristics of workers. One or both of these messages occurs in 12 (11.2%) of the documents.

Career Mobility. Messages 9 and 12 are relevant to the issue of career mobility. They state that people can probably find success and satisfaction in some range of occupations, rather than a single calling, and that career shifts may occur throughout one's lifetime. One or both of these messages occurs in 47 (43.9%) of the documents. Of these 47, the messages occur together in 17. These frequencies, plus the absence throughout the sample of any explicit support for the "single calling" notion, indicate that career mobility has been accepted as a current reality by career education writers.

Role of Leisure. Leisure activities as a major source of personal satisfaction is advocated in messages 25 and 35. One or the other occurs in 40 (37.4%) of the documents. This suggests fairly substantial support for the notion that the sources of satisfaction for many people may lie outside their work.

Importance of Education. The documents tend to advocate education and training as a means to career satisfaction and success. Thirty-five, or 32.7% of the documents contain message 36, whereas only two, or 1.9%, propose that not all respectable and satisfying careers require a college education. This suggests that the materials support the long-standing attitude that some work is more worthy and admirable than other work and that requirements for college preparation are an indicator of worthiness. On the other hand, advocacy of education and training may simply reflect the authors' intention of trying to keep students from dropping out of school.

Unions. A rather surprising finding was the almost complete absence in these materials of references to employee organizations and the collective protection of workers' interests. Only one document dealt with the role of labor unions.

Conclusions Based on Message Frequencies

1. Freedom of personal choice in selecting a career is the predominant theme, occurring at least once in 93.5% of the 107 documents.
2. That societal and personal circumstances may place practical limitations on freedom of career choice is stated in one-third of the documents.
3. Positive statements on the social or personal importance and value of work appear in two-thirds of the documents and are about twice as prevalent as negative or cautionary statements. Strongly negative statements about unpleasant or degrading aspects of work occur in only 6.5% of the documents.
4. At least one element of what is commonly referred to as the traditional or Protestant work ethic is presented in over 75% of the documents. The range of the various elements within a single document is very restricted, however.
5. Statements reflecting traditional values and attitudes appear more frequently than opposing or qualifying statements.
6. Extrinsic and intrinsic job characteristics as determiners of personal job satisfaction receive moderate (20%) and equal attention and tend to appear together within the same document.
7. Relatively frequent treatment (40%) is given to the necessity of the worker to adapt to employer demands, including rules of grooming and conduct.
8. References to worker participation in the design of tasks and the working environment, and the adaptation of jobs to the needs of workers appear infrequently (11%).
9. Career mobility and lifelong career development is presented as a current reality in a relatively high proportion of the documents (44%).

10. That leisure activities may be a major source of personal satisfaction, rather than or as a supplement to work, is presented in over one-third of the documents.
11. The importance of education and training to career success is advocated in about one-third of the documents. Explicit de-emphasis of college as prerequisite to career success was found in only two of the 107 documents.
12. The role of organized labor in determining working conditions, incentives, and job availability is addressed in only one of the sample documents.

Interdependencies and Patterns

Two kinds of analysis were performed to reveal patterns or clustering among the 49 value categories. First, dependencies between categories were examined for significant co-occurrence, i.e., whether or not pairs of messages reliably occurred together in the same document. Additionally, a factor analysis was performed to determine whether or not and to what extent the 49 categories could be reduced to empirically based "factors" that might be interpreted as value patterns or work ethics.

Prior to these analyses, all messages that occurred in fewer than three documents were deleted from the message set. This was because the data records are binary (occurrence and non-occurrence), and analysis of covariance of binary events that occurred only one or two times would produce trivial if not meaningless results. Consequently, messages 7, 31, 44, 47, 48, and 49 were deleted, leaving a set of 43 messages for further analysis.

One-to-one Dependencies. The 43-message set contains 903 pairs.* For each pair a contingency table was constructed and dependency between the two messages was tested by means of chi square. Chi square (corrected for continuity) is significant at or beyond the .05 level for 124 pairs. Table 4 indicates for which pairs chi square was found to be significant.

The degree of correlation for each pair of value categories was estimated by calculating the phi coefficient. Since chi square may be used to assess the significance of phi, entries (X's) in Table 4 indicate pairs for which phi was found to be statistically significant. Over 13% (124 of 903) of the pairs

*
$$\text{Number of pairs} = \frac{43 \times 42}{2} = 903$$

DEPENDENCIES BETWEEN OCCURRENCE OF 43 VALUE MESSAGES
IN 107 CAREER EDUCATION DOCUMENTS
(BLANK INDICATES NON-SIGNIFICANT CHI SQUARE*; X INDICATES
STATISTICAL SIGNIFICANCE AT OR BEYOND THE .05 LEVEL)

Message Number

* Chi square was calculated from a 2x2 contingency table, corrected for continuity, and evaluated for 1 degree of freedom.

yielded significant phi coefficients; however, the degree of relationship is generally low to moderate. The most substantial correlations are shown in Table 5. For a given pair in sequence AB, the table entries may be read as follows: If message A occurred in a document, it is likely that B also occurred in that document. The proportion shown in the final column may be interpreted as the probability that B occurred if A occurred.

Patterns. Examination of pairs of value categories in isolation of other categories and other pairs does not, of course, shed light on the possible existence of more complex patterns among the 43 variables. Further, it seems that what is referred to as a "work ethic" is more complex than a simple value category or pair of such categories. In an attempt to reveal more complex patterns that might exist within the observed data, a factor analysis was performed on the full set of 43 value categories or messages.

Factor analysis is a statistical technique to help find a small number of basic dimensions that describe a set of complex interrelationships. In this study, the interrelationships are 903 two-variable correlations between the 43 value categories. Factor analysis facilitates the description and interpretation of this large number of interrelationships. It permits identification of clusters of variables that are more closely associated with each other and less closely associated with variables from other clusters.

Phi coefficients for each pair of value categories were processed by Kaiser's varimax method for generating orthogonal factors. Ten factors were obtained, which accounted for 57 percent of the intercorrelation variance.*

Factor loadings for each of 38 value categories (messages) are shown in Table 6. These loadings indicate the degree of correlation between the categories and the factors, and are helpful in interpreting the factors. Interpretation was based on factor loadings above .299. This criterion eliminates five messages from factor interpretation because none of their loadings is above .299 on any of the ten factors. Thirty-one messages are unique to a single factor. Five messages have loadings on two factors, two on three factors, and none on more than three.

*The eigenvalue for the tenth factor was 1.52

The meanings of the ten factors that emerged from this analysis are not obvious, and their interpretation is somewhat hazardous. The correlations on which the analysis is based are generally low. Furthermore, this set of factors is but one of many possible results that could be obtained from these data. The ten factors reported here seem to make sense, relative to other solutions that were obtained, but they must be regarded as no more than suggestive of basic dimensions underlying the set of interrelated value categories.

TABLE 5
PHI COEFFICIENTS AND CONDITIONAL PROBABILITIES
FOR SELECTED PAIRS OF VALUE MESSAGES

Message Number	Message Pair	Phi	CP*
21 20	If: Intrinsic Factors Affect Satisfaction Then: Extrinsic Factors Affect Satisfaction	.81	.91
37 29	If: Work Satisfies Psychological Needs Then: Success Enhances Self Esteem	.53	.75
24 37	If: Worker Should Influence Nature of Job Then: Work Satisfies Psychological Needs	.48	1.00
4 5	If: People Need To Be Productive Then: Work Can Be Personally Satisfying	.47	.72
9 12	If: May Succeed In Many Different Jobs Then: Choice Evolves Throughout Lifetime	.45	.89
46 38	If: People Do Well What They Enjoy Doing Then: Satisfaction Comes From Pride In Work	.42	.75
41 25	If: Someone Must Work For All We Have Then: Leisure Contributes To Satisfaction	.41	.71
41 36	If: Someone Must Work For All We Have Then: Education And Training Are Important	.41	.71

*CP: Given that the first listed message occurred in a document, the second listed message also occurred in the indicated proportion of those documents.

TABLE 6
LOADINGS (x 100) OF 38 VALUE CATEGORIES (MESSAGES)
ON TEN FACTORS

Message Number	Message	Factors									
		A	B	C	D	E	F	G	H	I	J
25	Leisure contributes to satisfaction	63									
11	External factors influence choice	58									
36	Education and training are important	53									
39	Individual free to choose own career	51									
15	Success requires interpersonal skills	50									
41	Someone must work for all we have	50									
16	Success requires adaptability	47									
9	May succeed in many different jobs	46									
3	People work to earn a living	36									
24	Worker should influence nature of job		73								
37	Work satisfies psychological needs		67								
29	Success enhances self esteem		62								
35	Work may be a means to other ends		51								
46	People do well what they enjoy doing		41								
33	Satisfaction in one's work essential		35								
20	Extrinsic factors affect satisfaction			89							
21	Intrinsic factors affect satisfaction			86							
19	People vary in degree of satisfaction				64						
27	Type of work affects whole way of life	33			46						
30	Work can adversely affect one's health				46						
45	Reward is function of productivity		39		-40				33		
23	Some jobs are degrading					74					
28	Identity and status come from work					50					
43	Success requires communication skills					45					
34	Satisfaction in one's work difficult				41	45					
40	Jobs should accommodate individuality						75				
12	Choice evolves throughout lifetime	40		31			45				
22	Some aspects of any job are unpleasant							-53			
6	Work is expected of everyone							41			
38	Satisfaction comes from pride in work	30						33			
2	There is dignity in all work							33			
32	Life satisfaction requires liking work								66		
26	Work is the major activity in life								66		
4	People need to be productive									78	
5	Work can be personally satisfying							34		60	
14	Success requires self reliance						31			35	
13	Success requires adjusting to job										67
17	Success requires hard work										50
1	People work for many different reasons										
8	Choice requires matching self and job										
10	Jobs have advantages and disadvantages										
18	Hard work may not lead to success										
42	Self esteem contributes to success										

No factor loadings above .299

Factor A: General

	<u>Value Category</u>	<u>Loading</u>	<u>% Documents*</u>
25.	Leisure contributes to satisfaction	.63	32.7
11.	External factors influence choice	.58	33.6
36.	Education and training are important	.53	32.7
39.	Individual free to choose own career	.51	15.9
15.	Success requires interpersonal skills	.50	30.8
41.	Someone must work for all we have	.50	19.6
16.	Success requires adaptability	.47	18.7
9.	May succeed in many different jobs	.46	17.8
12.	Choice evolves throughout lifetime	.40	42.1
3.	People work to earn a living	.36	33.6
27.	Type of work affects whole way of life	.33	31.8
38.	Satisfaction comes from pride in work	.30	10.3

This is a general factor with no discernible central theme. It is a conglomeration of compatible ideas that may express the general, and therefore unfocussed, message that runs through the sample of career education materials. The following is a statement of this compound message, with the components placed in a logical sequence:

Work is necessary to the individual and society; you must work in order to be independent; your career will affect your whole way of life; you have the right to choose your own career, without artificial restrictions, but societal and personal circumstances may limit your choice; you can probably succeed and be happy in many different occupations; career development and choice will probably continue throughout your life; your chances for success and satisfaction depend on how much education and training you get, on your ability to get along with people, and on your willingness and ability to adapt to changing opportunities and responsibilities; job satisfaction depends on whether or not you take pride in work well done; work isn't everything — personal satisfaction can come from leisure activities.

* Percentage of the 107 documents in which the message occurred at least once.

More than 80 percent of the documents in the sample contained at least one of the 12 messages that define Factor A. More than half of them contain three or more of the messages. Twelve documents (11%) contained seven or more of the 12 messages. It appears, then, that this set of mutually compatible value categories pervades the sample documents and is an accurate characterization of the broad theme they convey.

Factor B: Workers' Rights and Psychological Needs

	<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
24.	Worker should influence nature of job	.73	2.8
37.	Work satisfies psychological needs	.67	11.2
29.	Success enhances self esteem	.62	17.8
35.	Work may be a means to other ends	.51	4.7
46.	People do well what they enjoy doing	.41	3.7
45.	Reward is function of productivity	.39	4.7
33.	Satisfaction in one's work essential	.35	10.3

The common thread among the seven value categories above appears to be a concern for the satisfaction of workers' psychological needs. The heavy loading on category 24 suggests that workers' rights is the central theme of this factor.

Factor C: Determiners of Job Satisfaction

	<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
20.	Extrinsic factors affect satisfaction	.89	22.4
21.	Intrinsic factors affect satisfaction	.86	19.6
12.	Choice evolves throughout lifetime	.31	42.1

This factor clearly focuses on job satisfaction as a function of job characteristics, both extrinsic and intrinsic.

Factor D: Uncertainty of Satisfaction in Work

<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
19. People vary in degree of satisfaction	.64	6.5
27. Type of work affects whole way of life	.46	31.8
30. Work can adversely affect one's health	.46	5.6
34. Satisfaction in one's work difficult	.41	2.8
45. Reward is function of productivity	-.40	4.7

Factor D seems to say that satisfaction does not come automatically. Messages 34 and 19 state that job satisfaction is difficult to achieve and that not everyone does achieve it. Messages 27 and 30 may relate to this factor because they stress the criticality of job satisfaction, which expands Factor D to the assertion that although satisfaction is difficult to find, it's worth searching for. The negative loading of message 45 suggests that belief in a close correspondence between reward and results is at odds with Factor D, which implies that not only is satisfaction difficult to achieve, but the rules that govern reward aren't clear.

Factor E: Uninterpretable

<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
23. Some jobs are degrading	.74	2.8
28. Identity and status come from work	.50	5.6
43. Success requires communication skills	.45	3.7
34. Satisfaction in one's work difficult	.45	2.8

This is a strange combination of messages, whose mutual affinity is not apparent. The very low frequencies of occurrence of all four messages suggest that the factor may simply be a statistical artifact (as may be the case with the other factors as well). It is tempting to use messages 23 and 34 to define the factor as anti-work, but examination of the contingency table for 23 and 34 reveals lack of correlation between those two messages.

Factor F: Self Actualization

<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
40. Jobs should accommodate individuality	.75	10.3
12. Choice evolves throughout lifetime	.45	42.1
14. Success requires self reliance	.31	14.0

Factor F is clearly concerned with individual uniqueness and its preservation in work. It appears to be an affirmation of the worth and dignity of the worker and, by implication, a denial of the notion that the job to be done has priority over the worker as a person or that jobs are things to be adapted to.

Factor G: Work Is Good

<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
6. Work is expected of everyone	.41	14.0
5. Work can be personally satisfying	.34	26.2
38. Satisfaction comes from pride in work	.33	10.3
2. There is dignity in all work	.33	43.0
22. Some aspects of any job are unpleasant	-.53	4.7

Factor G appears to express the traditional view of work as an expected, respected, and rewarding part of life. The negative loading of message 22 indicates that concern with the unpleasant side of work is incompatible with this factor.

Factor H: Work Is Central

<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
32. Life satisfaction requires liking work	.66	8.4
26. Work is the major activity in life	.66	11.2
45. Reward is function of productivity	.33	4.7

The essence of this factor appears to be an equating of work and life.

Factor I: Need To Be Productive

<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
4. People need to be productive	.78	16.8
5. Work can be personally satisfying	.60	26.2
14. Success requires self reliance	.35	14.0

Factor I appears to affirm the human need for and satisfaction in being productive and contributing to society.

Factor J: Worker's Obligation

<u>Value Category</u>	<u>Loading</u>	<u>% Documents</u>
13. Success requires adjusting to job	.67	40.2
17. Success requires hard work	.50	6.5

Factor J is a core element of the traditional work ethic that places the responsibility on the worker to meet the demands of the job and follow the employer's rules.

Differences Between Sample Sub-Groups

Does the value content of a document depend on whether it was prepared for elementary as opposed to secondary programs? Or on whether it was addressed to school staffs rather than students? Or developed by commercial publishers as distinct from public educational agencies?

These questions were examined by comparing the extent to which the various subgroups in the sample of documents place emphasis on each of the ten factors derived from the factor analysis. "Extent of emphasis" was estimated by computing factor scores for each document, then computing a mean factor score for each subgroup, e.g., commercially developed documents or documents aimed at the primary grades. Factor scores are standard scores with a mean of zero and a standard deviation of 1.0. Thus, a factor score expresses a document's "extent

of emphasis" on a given factor in terms of how far that document's score is above (plus) or below (minus) the mean for all documents. The distance above or below the mean is expressed in units of standard deviation.

A review of Table 1 on page 20 reveals that the sampling dimensions are not independent of one another. The distribution of documents by sampling subgroups is such that commercially developed materials (Developer Class A) are predominantly for student use (Types II and IV) at the secondary level of schooling (Level 2). Similarly, non-commercially developed materials (Developer Classes B and C) are predominantly staff-oriented (Types I and III) at the elementary or mixed levels of schooling (Levels 1 and 3). As a result of this imbalance or confounding of sample dimensions, it is not possible to attribute differences between the various groups specifically to any one of the three sampling variables, i.e., type, developer, or level. But some insights may be gained into the combined effects of these variables on value content.

Analysis of variance was used to test the significance of the differences between mean factor scores of document sub-groups, i.e., to estimate the probability that the observed differences would have occurred due to chance sampling errors. Thirty such analyses were performed (3 sample dimensions x 10 factors = 30). Table 7 summarizes the results of these analyses, in which a blank indicates non-significance, and a single, double, or triple asterisk indicates significance at the .05, .01, and .001 levels respectively. Degrees of freedom in evaluating the computed variance ratios (F) were 3 and 103 for Type comparisons, and 2 and 104 for Developer and Level comparisons.*

For those factors (A, C, D, G, and I) that yielded at least one significant F, the mean factor scores and the value of F on each sampling dimension are shown below, followed by a brief discussion of the observed differences.

* Isolation of main effects and first and second-order interactions would require a three-way analysis of variance. However the empty cells and small n's in other cells in the 4 x 3 x 3 structure obviates such an analysis.

TABLE 7
RESULTS OF ANALYSES OF VARIANCE
OF FACTOR SCORES FOR TEN FACTORS
BY TYPE OF DOCUMENT, CLASS OF DEVELOPER,
AND LEVEL OF SCHOOLING

Factor	Comparison		
	Type	Developer	Level
A. General	*		***
B. Workers' Rights and Needs			
C. Determiners of Job Satisfaction			*
D. Uncertainty of Satisfaction		*	
E. Uninterpretable			
F. Self Actualization			
G. Work is Good	*		**
H. Work is Central			
I. Need to Be Productive	*		**
J. Workers' Obligations			

* .05 level of significance
 ** .01 level of significance
 *** .001 level of significance

Factor A: General

<u>Type of Document</u>	<u>Mean Factor Score</u>
I. Planning Materials	.34
II. Student Materials	-.22
III. Teacher/Counselor Materials	.22
IV. Assessment Instruments	-.50

$F = 3.91$ (Significant at .05 level.)

<u>Class of Developer</u>	<u>Mean Factor Score</u>
A. Commercial Publisher	-.09
B. Federal, State, County, College	.15
C. Local District or School	-.03

$F = 0.69$ (Non-significant.)

<u>Level of Schooling</u>	<u>Mean Factor Score</u>
1. Elementary	.12
2. Secondary	-.28
3. Mixed or Unspecified	.62

$F = 8.95$ (Significant at .001 level.)

The results suggest that Factor A is more strongly represented in materials aimed at teachers, counselors, and administrators for programs at the elementary or mixed level than it is in materials for secondary students.

Factor C: Determiners of Job Satisfaction

<u>Type of Document</u>	<u>Mean Factor Score</u>
I. Planning Materials	-.53
II. Student Materials	-.03
III. Teacher/Counselor Materials	.12
IV. Assessment Instruments	-.04
F = 1.22 (Non-significant.)	

<u>Class of Developer</u>	<u>Mean Factor Score</u>
A. Commercial Publisher	.15
B. Federal, State, County, College	-.08
C. Local District or School	-.12
F = 0.86 (Non-significant.)	

<u>Level of Schooling</u>	<u>Mean Factor Score</u>
1. Elementary	-.17
2. Secondary	.23
3. Mixed or Unspecified	-.43
F = 4.51 (Significant at .05 level.)	

The data indicate that materials aimed at the secondary level emphasize Factor C more than do elementary and mixed materials.

Factor D: Uncertainty of Satisfaction in Work

<u>Type of Document</u>	<u>Mean Factor Score</u>
I. Planning Materials	.03
II. Student Materials	.31
III. Teacher/Counselor Materials	-.13
IV. Assessment Instruments	-.11

F = 1.69 (Non-significant.)

<u>Class of Developer</u>	<u>Mean Factor Score</u>
A. Commercial Publisher	.28
B. Federal, State, County, College	-.19
C. Local District or School	-.19

F = 3.91 (Significant at .05 level.)

<u>Level of Schooling</u>	<u>Mean Factor Score</u>
1. Elementary	-.17
2. Secondary	.00
3. Mixed or Unspecified	.21

F = 1.07 (Non-significant.)

This factor represents some unpleasant realities about work, implying that although personal satisfaction is difficult to find, it's worth searching and striving for. Commercially developed materials tend to emphasize this factor more than do materials developed by local and intermediate schools, Federal and state government agencies, or colleges and universities. It might be hypothesized that commercial developers tend to be more tough-minded and reality-oriented than non-commercial developers; however, the observed differences in value content may be attributable to the fact that commercially developed materials in this sample are predominantly directed toward the secondary grades.

Factor G: Work is Good

<u>Type of Document</u>	<u>Mean Factor Score</u>
I. Planning Materials	.32
II. Student Materials	-.36
III. Teacher/Counselor Materials	.19
IV. Assessment Instruments	-.16

F = 3.23 (Significant at .05 level.)

<u>Class of Developer</u>	<u>Mean Factor Score</u>
A. Commercial Publisher	-.20
B. Federal, State, County, College	.09
C. Local District or School	.18

F = 2.05 (Non-significant.)

<u>Level of Schooling</u>	<u>Mean Factor Score</u>
1. Elementary	.29
2. Secondary	-.27
3. Mixed or Unspecified	.39

F = 7.12 (Significant at .01 level)

Materials directed toward school staffs at the elementary or mixed level emphasize the traditional view of work as an expected, respected, and rewarding part of life to a greater extent than do materials aimed at secondary students.

Factor I: Need To Be Productive

<u>Type of Document</u>	<u>Mean Factor Score</u>
I. Planning Materials	-.50
II. Student Materials	.00
III. Teacher/Counselor Materials	.20
IV. Assessment Instruments	-.36

F = 2.95 (Significant at .05 level.)

<u>Class of Developer</u>	<u>Mean Factor Score</u>
A. Commercial Publisher	-.01
B. Federal, State, County, College	.09
C. Local District or School	-.08

F = 0.29 (Non-significant.)

<u>Level of Schooling</u>	<u>Mean Factor Score</u>
1. Elementary	.50
2. Secondary	-.18
3. Mixed or Unspecified	-.13

F = 6.42 (Significant at .01 level.)

Curriculum materials directed toward students, teachers, and counselors lay greater stress on this factor than do student assessment instruments and curriculum planning materials. Also, elementary materials score higher on this factor than mixed and secondary. These two findings are not consistent with the confounding of variables noted earlier and it is not possible from the present data to resolve this ambiguity.

CONCLUSIONS & IMPLICATIONS

CONCLUSIONS

Taken as a whole, the sample of materials we examined reflects a wide range of value positions. Fundamental themes of the traditional work ethic are represented along with positions representing more recent trends. Collectively these materials may be said to be in touch with what is reported by serious observers of work in America. But while diversity of value positions is characteristic of the sample *as a whole*, it is not typical of the individual documents comprising the sample. The range of positions represented in the sample would be sharply reduced by selective removal of a few key documents. Several issues debated extensively in the literature — such as status, class bias toward occupations, moral and social purpose vis a vis work — are dealt with in the vast majority of documents only superficially or not at all. The documents typically do not acknowledge the reality or value implications of "alienating" or intrinsically uninvolving jobs. Rather, the dominant assumption appears to be that satisfaction is relative and everyone can find his or her niche.

In trying to arrive at some general conclusions and action implications, we have made some qualitative judgments about the "typical" item of career education material. These judgments are informed, of course, by the objective analysis — especially the simple frequency counts — but they are also influenced by general impressions that emerged from hours of plodding through the sample materials against a backdrop of the professional literature. Our qualitative assessment focused on two questions: (1) Do the materials present a "realistic" view of work? and (2) Do the materials convey an industry-serving party-line? We answer both questions "no," the second with some qualification.

Are the Materials Realistic?

A goal of career education, as noted earlier, is to equip students with realistic expectations about work. One basis, then, for assessing career education materials is to ask how well those materials square with "reality." This question implies that we can define reality — that we know what work is really like and how workers really feel about it. But, as shown in our review of the literature, solid evidence on work and workers' attitudes remains incomplete and contradictory, and an unequivocal view of the realities of work is difficult, if not impossible, to construct. Nevertheless, it is possible to contrast the dominant view of work portrayed in educational materials with that portrayed in the professional literature.

The materials emphasize breadth of career opportunity, freedom of individual choice, the inherent dignity and centrality of work, and the rewards of diligence. In contrast, the literature emphasizes the boredom and humiliation of many jobs, the imperfect relationship between reward and performance, the persistent inequities in career opportunity, and hard dilemmas involved in choosing usable work values and integrating them into one's personal value system. We arrive, then, at the principal finding of this study: Career education materials present a much more attractive, even idealized, view of work than the view that dominates the writings of contemporary scholars and journalists. Our judgment is that for the most part the issues and problems involved in value clarification and career choice are dealt with in the materials too superficially to accommodate the educational needs portrayed in the literature. Despite conflicting evidence and unresolved issues, the cautionary, less idealized view is widely held by competent observers and must be taken seriously in any attempt to depict the contemporary "reality" of work. Ignoring or treating this view superficially is unjustified. *We conclude that the analyzed materials are defective in supporting career education's goal of realistic student expectations.*

It might be argued that materials play a relatively minor role in most career education programs and that "reality" is introduced through other means, such as direct work experience. Nevertheless, despite this possibly minor role, materials should support the goal of realism and be consistent with other learning mechanisms.

This of course does not imply that curriculum writers must choose between positive and negative views of work, or that the latter should replace the former. We recognize the extent to which a society's cohesion and vitality depend on an affirmative view of the work that sustains it. We also recognize the importance of student motivation, and the deadening effect that insensitive, premature exposure to negative facts and opinions might have on motivation and aspiration.

The point is that there are (at least) two sides to the vital issues surrounding work in America and that preparing young people to enter adult working life must include judicious exposure to both sides of those issues. It is our judgment that curriculum writers have tended to work only one side of the street and that the resultant unbalanced concentration on an idealized view of work promotes naiveté that sets the student up for eventual disillusionment and defeat.

Are the Materials Doctrinaire?

The charge has been made that career education seeks to perpetuate social stratification and to ensure continuation of a subservient working class.* The emphasis we found in the materials on the dignity of work, reward for diligence, and the need to adjust to demands of the job, as well as their silence on the role of organized labor, might be interpreted as exhortation in support of industry-serving dogma. However, this strong representation of the "industrial" facet of the ethic is balanced by considerable stress on self-actualization, freedom of career choice, and life-long career development. It is our judgment that the authors of these materials genuinely intend to serve individual student needs and to expand students' expectations and aspirations. That the inspirational message is delivered in comparatively naive

* See, for example, Grubb, W. Norton and Lazerson, Marvin, "Rally 'Round the Workplace: Continuities and Fallacies in Career Education," Harvard Educational Review, 1975, 45, 451-474.

or uninformed terms and without adequate caution is the principal fault we find with the materials we analyzed. We found no evidence, however, to support the claim that career education aims at "reducing expectations" and "limiting aspirations."*

IMPLICATIONS

We believe that the results of this study reflect a general defect in the current practice of career education, namely, an overly simple and narrowly biased treatment of work-related values and attitudes. We further believe that value development is of utmost importance and deserves to be dealt with as effectively as our current knowledge permits. Whether education's task is viewed in traditional terms as inculcating certain values, or instead as helping students choose their own ethical systems, there is an urgent need for educational practice that is firmly rooted in relevant research and theory.

Practice can probably be improved in the near term by applying what is already known about work and value development. Success over the long haul will undoubtedly require further research to augment and refine the current knowledge base. Listed below are some areas in which effort is needed — either to inform educators about what is already known, or to do research aimed at filling serious gaps in our current understanding:

- a. What conceptual schemes and terminology are currently in use in thinking, talking, and writing about work? For example, what distinctions are made between work, labor, and job? There is a need for further conceptualization and refinement to provide a common framework and language for investigating and communicating about these phenomena.

* Ibid, p. 473. We recognize that this is not a strong refutation of critics' claims of career education's subservience to the needs of employers, since career education is much more than printed materials. Also, charges of hypocrisy in career education are invulnerable to evidence from this or similar analyses.

- 7
- b. What is known about the nature of contemporary work and workers' attitudes toward it, and what are the vital issues about which there is important controversy? There are obvious gaps and ambiguities requiring further clarification. It should not be expected, however, that more money and effort will lead to a simple and complete truth about work in America. The complex and shifting manifestations of work and worker attitudes, coupled with some difficult methodological problems, ensure continuing uncertainty and debate.
 - c. What specific work-related values or attitudes are important to the health and survival of our social system and the individual citizen? What conflicts exist between specific values and what are the arguments pro and con concerning these conflicts? What procedures might be used to formulate value statements and reach group consensus? Despite the private and politically sensitive nature of personal values, they should be the subject of serious public discussion, and the schools should not bear the full burden of defining and selecting the values they try to convey.
 - d. How are work-related values and attitudes acquired? What are the respective roles of various factors in influencing the development of these values and attitudes, e.g., parents (both genetic and environmental influences), school, peers, media, direct experience?
 - e. What are the potential strengths and limitations of formal education in influencing value development? How effective are specific educational strategies in influencing the development of personal values? What are the pros and cons concerning competing or conflicting strategies, e.g., inculcation versus permissive clarification? It may be that formal schooling can have little or no effect on the development of personal values — that home influences, for example, have such overriding impact that the effect of

schooling is negligible. Even if we knew that to be the case, it does not follow that the value content of school materials is unimportant. If educators preach things that don't square with what students are learning elsewhere, this disparity can only erode education's credibility in the eyes of its students and the public. If for no other reason than to maintain public confidence, educators must display currency and sophistication about what's happening in the workplace.

Our negative assessment of the current state of value development in education can be countered with examples of high quality materials and practice. Indeed, our sample included some documents with impressive value content. It is our overall judgment, however, that the prevailing approach to value development in the schools is superficial, haphazard, and out of touch with research and theory. This must be corrected, because how tomorrow's citizens regard work will strongly affect the kind of society we have and the kinds of lives we live. Piecemeal efforts will not do the job; what is needed is a serious, systematic, and well-informed national effort to deal with the affective side of youth socialization — that is, to recognize the potency of personal feelings, values, perceptions, and expectations in shaping political, social, and economic events; to face up to the possibility that profound changes may be occurring in the way economic life is perceived and assessed by our citizenry; and to bring educational resources to bear on the complex and delicate task of preparing new generations to join and replace old ones in a healthy and orderly way.

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APPENDIX A
LIST OF ANALYZED MATERIALS

Following each reference is a three-part code that identifies the type of document, class of developer, and level of schooling. These categories are coded as follows:

Type

- I. Program planning document
- II. Student text, workbook, or filmstrip
- III. Teachers' guide, guidance manual, or infusion material
- IV. Student assessment instrument

Developer

- A. Commercial publisher
- B. Federal, state, or intermediate agency; college or university
- C. Local district or school

Level

- 1. Elementary
- 2. Secondary
- 3. Unspecified or mixed elementary and secondary

APPENDIX A

LIST OF ANALYZED MATERIALS

1. Alfano, Anthony M. Employment Readiness Scale. 1973. (IV B 2)
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